

# Course of Study Computer Science (Study Cohort w17)

## Sample course plan A Bachelor Computer Science (CSBS)

### Specialisation Computational Mathematics

Semester 1		Semester 2	Semester 3	Semester 4	Semester 5	Semester 6
Form Hrs/wk		Form Hrs/wk	Form Hrs/wk	Form Hrs/wk	Form Hrs/wk	Form Hrs/wk
1	<b>Discrete Algebraic Structures</b>	<b>Objectoriented Programming, Algorithms and Data Structures</b>	<b>Computer Engineering</b>	<b>Computability and Complexity Theory</b>	<b>Seminars Computer Science and Mathematics</b>	<b>Algebra and Control</b>
2	Discrete Algebraic Structures VL 2	Objectoriented Programming, Algorithms and Data Structures VL 4	Computer Engineering VL 3	Computability and Complexity Theory VL 2	Seminar Computational Engineering Science SE 2	Algebra and Control VL 2
3	Discrete Algebraic Structures GÜ 2	Objectoriented Programming, Algorithms and Data Structures GÜ 1	Computer Engineering GÜ 1	Computability and Complexity Theory GÜ 2	Seminar Computational Mathematics/Computer Science SE 2	Algebra and Control GÜ 2
4					Seminar Engineering Mathematics/Computer Science SE 2	
5						
6						
7	<b>Procedural Programming</b>	<b>Automata Theory and Formal Languages</b>	<b>Computernetworks and Internet Security</b>	<b>Signals and Systems</b>	<b>Software Industrial Internship</b>	<b>Solvers for Sparse Linear Systems</b>
8	Procedural Programming VL 1	Automata Theory and Formal Languages VL 2	Computer Networks and Internet Security VL 3	Signals and Systems VL 3		Solvers for Sparse Linear Systems VL 2
9	Procedural Programming HÜ 1	Automata Theory and Formal Languages GÜ 2	Computer Networks and Internet Security GÜ 1	Signals and Systems GÜ 2		Solvers for Sparse Linear Systems GÜ 2
10	Procedural Programming PR 2					
11						
12						
13	<b>Functional Programming</b>	<b>Software Engineering</b>	<b>Mathematics III</b>	<b>Stochastics</b>	<b>Computational Geometry</b>	<b>Mathematics IV</b>
14	Functional Programming VL 2	Software Engineering VL 2	Analysis III VL 2	Stochastics VL 2	Computational Geomeetry VL 2	Complex Functions VL 2
15	Functional Programming HÜ 2	Software Engineering GÜ 2	Analysis III GÜ 1	Stochastics GÜ 2	Computational Geomeetry GÜ 2	Complex Functions GÜ 1
16	Functional Programming GÜ 2		Analysis III HÜ 1			Complex Functions HÜ 1
17			Differential Equations 1 VL 2			Differential Equations 2 VL 2
18			Differential Equations 1 GÜ 1			Differential Equations 2 GÜ 1
19			Differential Equations 1 HÜ 1			Differential Equations 2 HÜ 1
20	<b>Linear Algebra</b>	<b>Mathematical Analysis</b>		<b>Graph Theory and Optimization</b>	<b>Numerical Mathematics I</b>	<b>Bachelor Thesis</b>
21	Linear Algebra VL 4	Mathematical Analysis VL 4		Graph Theory and Optimization VL 2	Numerical Mathematics I VL 2	
22	Linear Algebra HÜ 2	Mathematical Analysis HÜ 2		Graph Theory and Optimization GÜ 2	Numerical Mathematics I GÜ 2	
23	Linear Algebra GÜ 2	Mathematical Analysis GÜ 2	<b>Introduction to Information Security</b>			
24			Introduction to Information Security VL 3			
25			Introduction to Information Security GÜ 2			
26				<b>Operating Systems</b>	<b>Combinatorial Structures and Algorithms</b>	
27		<b>Foundations of Management</b>		Operating Systems VL 2	Combinatorial Structures and Algorithms VL 3	
28		Introduction to Management VL 3		Operating Systems GÜ 2	Combinatorial Structures and Algorithms GÜ 1	
29		Project Entrepreneurship PBL 2				
30						
31						
32						

Nontechnical Complementary Courses for Bachelors (from catalogue) - 6LP

The choice of courses from the catalogue is flexible (depends on the semestral work load), provided the necessary number of required credits is reached.

